

CHARACTERISTICS OF OCEAN VESSELS



STRATEGIC DEPLOYMENT PLANNING COURSE



MILITARY SEALIFT COMMAND



Provide immediate sealift capability to support contingency, general war plans or other emergencies

Between 90% & 95% of all the equipment will be sent via strategic sealift

HOW MSC OBTAINS VESSELS



MSC CONTROLLED

(8 FSS)



READY RESERVE FORCE

(5,10,20,30 day readiness
status maintained by MARAD)



U.S. FLAG (Merchant ships,
voluntary charter)

HOW MSC OBTAINS VESSELS



Effective U.S. Control (US business own ships flown under foreign crews and flags)



NATO (pool of ships available for increased readiness)



NDRE (ships requiring 30 to 60 days)

MSC SHIPPING CATEGORIES

☒ PREPOSITIONED
SHIPS

☒ SURGE

☒ SUSTAINMENT



CONVENTIONAL BREAKBULK

- * BOOMS & CRANES/MULTIPLE HOLDS
- * SELF-SUSTAINING
- * LABOR INTENSIVE
- * NONCOMPETITIVE WITH INTERMODAL VESSELS



AUXILIARY CRANE SHIP (T-ACS)



Conversion of 9 container ships.



All the crane pedestals are on the starboard side of the vessel.



Good for “LOTS” operations, discharging containerships.

Off-load containers and outside cargo from a non-self sustaining cargo ship offshore.

T-ACS DISCHARGING CONTAINERS FROM A CONTAINER SHIP



ROLL-ON/ROLL-OFF SHIP

An ocean vessel with wide open deck areas that are suited for vehicles that can be driven on and off



ROLL ON/ROLL OFF



Fast turn around time/load with minimum effort and time

Well suited for oversized equipment and vehicles



Self-sustaining



Used during surge shipping



RO-RO

RAMP DOWN



RAMP UP



SEABEE VESSEL

The sea barge vessel can carry thirty eight 1,000 ton capacity barges - 97 ft long 35 ft wide.

Barges loaded by a stern elevator

Barges can be operated in inland waterway operations & shallow draft areas

SEABEE (BARGE CARRIER)

**2000 LONG TON
ELEVATOR
CAN MOVE
ARMY
LIGHTERAGE**



SEABEE (BARGE CARRIER)



LASH (BARGE CARRIER)

Lighterage Aboard SHip
vessels that carry
500-ton capacity
barges



Barges hoisted
aboard the stern by
a gantry crane

LASH (BARGE CARRIER)

Barges can be operated in shallow draft areas and used inland waterways

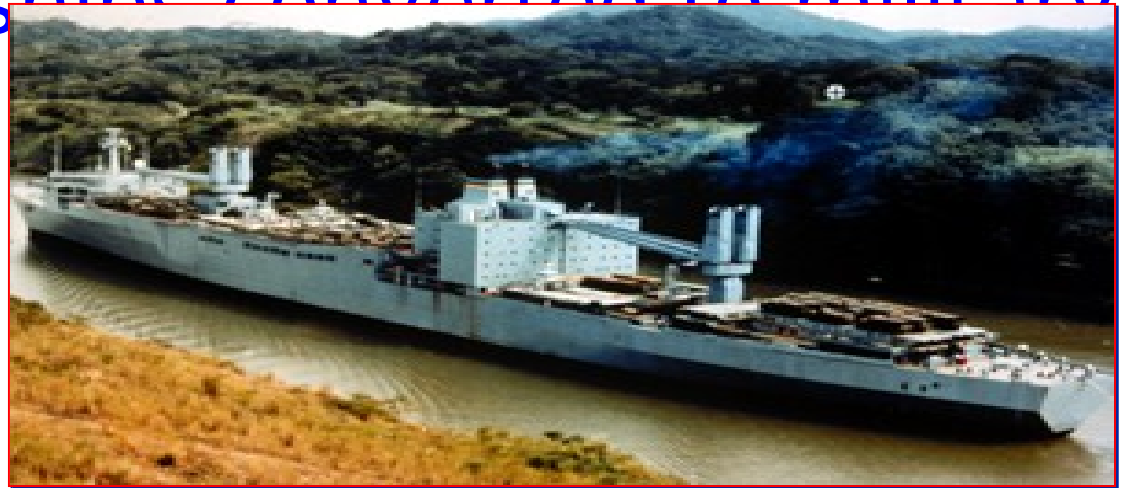
Barges are
59 ft 6 in long
& 26 ft wide



FAST SEALIFT SHIPS (FSS)

The FSS ship is a RO/RO combination ship

8 container ships converted to military



Their mission
is to enhance
strategic sealift



FAST SEALIFT SHIP

946 ft in length Maximum draft - 36 ft



RO/R
LO/LO

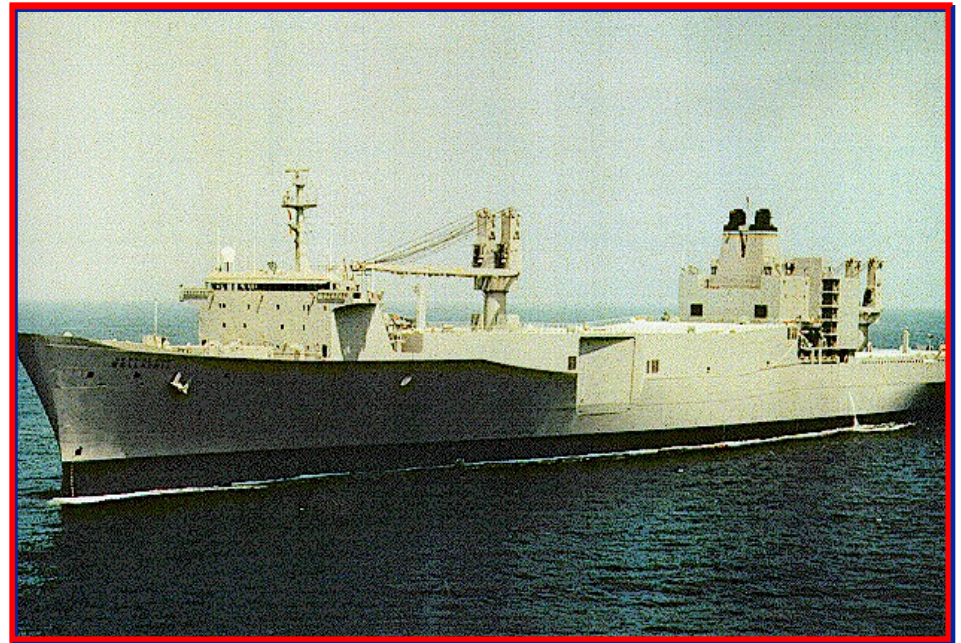
FAST SEALIFT SHIP

CAN TRANSPORT CONTAINERS AFT

RAMP CAPACITY IS 65 L/TONS

CAN TRANSPORT
1,100 VEHICLES

“SEASHEDS” &
“FLATRACKS”
TOO....



FAST SEALIFT SHIP

“SEASHEDS” & “FLATRACKS.....?”



SEA SHEDS



FLATRACK
S

CONTAINER SHIPS

Cellular stowage ships

Stow containers below and
above
the main deck

Well suited to
carry sustainmen
stocks



CONTAINER SHIPS

Although primarily
for **sustainment**, can
be used for surge...
but need these..



Flatracks & Seasheds

SEMISUBMERSIBLE

A ship used to transport watercraft & oversized cargo



“FLO-FLO” Operations

VESSEL IS SUBMERGED TO LOAD OR DISCHARGE VESSELS, BARGES



HEAVY LIFT SHIPS



LARGE MEDIUM SPEED RO/RO

5

(LMSR)

14 NEW CONSTRUCTION



✓ SLEWING STERN RAMP

✓ SINGLE PEDESTAL TWIN CRANES

✓ SIDE RAMP (MID-SECTION)

✓ EMERGENCY HELO PAD

LARGE MEDIUM SPEED RO/RO SHIP (LMSR)

Vessel designed to fulfill the shortfall of 2 million square feet in the sealift program.

The LMSR has an average of 350 thousand sq ft

Used extensively for the Army Prepositioned Afloat program.



LMSR CHARACTERISTICS

LOA 954 FT

BEAM 105 FT, 10 IN

DRAFT 37.0 FT

**RAMPS PORT / STARBOARD
 SIDE, STERN**

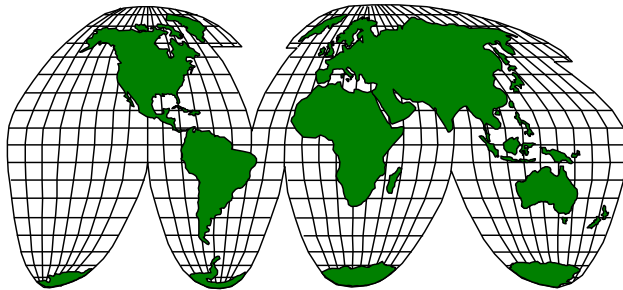
SERVICE SPEED 24 KNOTS

SHIP MIXES

MECHANIZED DIVISION:

**1.3 LMSR & 5
RO/ROS -or-
8 FSS & 1.9 RO/ROS
-or-
32.1 BREAKBULK**

AIRBORNE DIVISION: 4.1 FSS



**2.6 LMSR
15.3
BREAKBULK**

CHECKING ON LEARNING

- Q. WHAT ARE THE THREE SHIPPING CATEGORIES?
- Q. WHICH VESSEL HAS A WIDE OPEN DECK AREA THAT IS SUITED FOR VEHICLES THAT CAN BE DRIVEN ON AND OFF?
- Q. WHAT TYPE OF VESSEL CAN CARRY SEASHEDS AND FLATRACKS ABOARD?
- Q. WHAT TYPE OF VESSEL CAN DO A FLO-FLO OPERATION?

Hey this is great for **strategic sealift** but what about intra-theater water transportation? Is this where the **“Army’s Navy”** fits in?



LOGISTIC SUPPORT VESSEL (LSV)

CHARACTERISTICS/CAPABILITIES

LENGTH: 273 FEET

BEAM: 60 FEET

DISPLACEMENT (WEIGHT):
4,199 LONG TONS

DECK AREA: 10,500 SQ FT

PAYLOAD: 2,000 TONS

RANGE: LIGHT 8,200 NAUTICAL MILES AT 12.5 KNOTS
LOADED 6,500 NAUTICAL MILES AT 11.5 KNOTS

DRAFT: LIGHT 6 FEET / LOADED 12 FEET

CREW SIZE: 32 (8 WO/24 ENL FOR 24-HOUR OPERATION)



LCU 2000

CHARACTERISTICS/CAPABILITIES

LENGTH: 174 FEET

BEAM: 42 FEET

DISPLACEMENT (WEIGHT):
575 LONG TONS (LIGHT)
1,087 LONG TONS (LOADED)

DECK AREA: 2,500 SQ. FT.

PAYLOAD: 350 TONS

RANGE: LIGHT 10,000 NAUTICAL MILES AT 12 KNOTS
LOADED 6,500 NAUTICAL MILES AT 10 KNOTS

DRAFT: LIGHT 8 FEET, LOADED 9 FEET

CREW SIZE: 13 (2WO/11 ENL FOR 24-HOUR OPERATION)



LCM - 8

CHARACTERISTICS/CAPABILITIES

LENGTH: 74 FEET

BEAM: 21 FEET

DISPLACEMENT(WEIGHT):
58 LONG TONS (LIGHT)
111 LONG TONS (LOADED)

DECK AREA:
620 SQUARE FEET

PAYLOAD: 53 TONS

RANGE:
LIGHT: 332 NAUTICAL MILES AT 11 KNOTS
LOADED: 271 NAUTICAL MILES AT 9 KNOTS

DRAFT: LIGHT 3.5 FEET / LOADED 5 FEET

CREW SIZE: 6ENL (3 PER SHIFT FOR 24-HOUR OPERATION)





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